

SOUTHWARD EXTENSION OF RANGE OF
ARBUTUS MENZIESII

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Arbutus Menziesii, which covers a geographical range from British Columbia to southern California, where it is found locally, has been known for some time to occur in San Diego County. A record of two trees growing in a remote cañon near Nellie on Palomar Mountain, with specimens from one of them, collected in the year 1905, is to be found in the University of California Herbarium at Berkeley. An extension of the range of this species, now the southernmost known locality, not recorded hitherto, is to be noted in the occurrence of a great many madroños, several hundred in number, on Roderick Mountain some miles to the south and a shorter distance to the west of Palomar Mountain.

Roderick Mountain, located twenty-seven miles from the coast, the highest of a group of rugged mountains through which the cañon of the San Luis Rey River passes before emerging upon the valley floor near Rincon, rises to a height of 3800 feet. A long rather even northwest slope, with an extensive rock ledge rising several hundred feet in height on its west end, the base of the outcropping being on an average about 3000 feet in altitude, makes for a cooler, more humid spot, which is more favorable for this species than is usually found in southern California. The average seasonal rainfall of this area is probably around thirty inches; and it is not unlikely that summer fogs contribute toward making this a spot well adapted for our native *Arbutus*.

On this slope growing at an altitude of 2000 to 3000 feet, are a number of clumps and patches of madroños. The largest of these are found near the base of the rock ledge mentioned, and in the larger ravines of the slope, smaller clumps of smaller trees being scattered in the chaparral. The madroños of this area are all stump sprouts, as far as I have observed; the region has evidently been burned over repeatedly. A number of trees arise from each stump forming rounded clumps, the individual trees of which are slender in form. The trees I saw near at hand ranged from mere saplings to trees about thirty-five feet high, with trunks up to ten inches in diameter at the base; but I was unable to get to the more centrally located groups in which the trees may well be forty to fifty feet high, judging from afar, comparing them with the trees seen near at hand. Indications are that much larger madroños grew here at an earlier time, the size of some of the stumps suggesting a possible diameter of two feet. The remains of the previous generation of trees are to be found in places: the trunks of these approximate those now standing.

The slope on which the madroños grow is covered with a dense tall chaparral which is composed of species quite typical of this general region. California oaks (*Quercus agrifolia*) grow in close association with the madroños, being abundant in the ravines and

valleys of the slope. Black cottonwood (*Populus trichocarpa*), and western sycamore (*Platanus racemosa*) are found in the larger ravines. A single tree of *Libocedrus decurrens* was discovered growing in a ravine at an altitude of about 2000 feet. No other coniferous trees are to be found on Roderick Mountain, as far as I know; Bigcone Spruce (*Pseudotsuga macrocarpa*) grows a mile or two farther east on rocky out-croppings on the same side of the river.

My attention was called to the madroños of this locality by descriptions of "manzanita trees" said to be growing there by persons well acquainted with the region. Three trips were taken to the locality. The first, on January 1, 1931, was fruitful in the discovery of a single madroño (from which I took leaf specimens) and in catching sight of the larger groups of these trees growing high on the slope. Desirous of reaching these more extensive groups of larger trees I made a second trip on March 10. Although my objective was not attained, due to the density of the chaparral, I succeeded in reaching the patch of madroños growing high on the west end of the slope, and the uppermost in the ravine below it. It was gratifying to find the madroños blooming profusely at this time. In order to get a more general idea of the distribution of the madroños growing here, a third trip was taken by climbing a hill to the north of Roderick Mountain, from which an unobstructed view may be had of the whole extent of the northwest slope. The clumps of madroños, although a half mile or more away, were easily distinguishable from the rest of the vegetation, which, incidentally, was remarkably green for midsummer, by now July 30. The madroños in the more favorably located spots were in perfect condition at this time, but some of the trees in the drier locations showed evidence of drought.

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THE ROAD TO CIMA

MARY BEAL

There were four of us that started from Barstow on May 22, 1931, for a trip to Cima in the eastern Mohave Desert near the Providence Mountains. Miss A. L. Waterman, Mr. Irving Scott Jr., Mr. Herbert Manson and myself. It was a wonderful trip for scenery and a treat, even if we had not seen a flower. All of us were fascinated by the country and one of the delights was the surprise of it. We hadn't expected anything like it. About ten miles beyond Cronese Valley we came upon smoke trees'—many of them, in a wash leading from the mountains into Soda Lake basin. They are full of buds and I saw a few flashes of violet, but only a few. We want very much to go down in a week or so to see them in bloom. On the long climb from Baker to Halloran Springs and on to the summit² we found

¹ *Parosela spinosa* Hel. (W.L.J.).

² Yucca Grove station, about 2 miles easterly from Halloran Springs, where the road crosses the southerly extension of the Shadow Mountains (W.L.J.).